

**A/Prof A. F. Moynham
Sydney Forensic Medicine and Science Network
Department of Medical Genomics
Royal Prince Alfred Hospital
CAMPERDOWN NSW 2050**

Katherine Tierney
Detective Senior Constable
Unsolved Homicide Team – Homicide Squad
State Crime Command
Level 8, Tower B, Police Headquarters
1 Charles Street
PARRAMATTA NSW 2150

26 May, 2016

Dear Detective Senior Constable Tierney,

Re: Death of John Alan RUSSELL

I am registered as a medical practitioner in:

Australia (general registration)

Great Britain (general registration)

I hold the following qualifications:

**Bachelor of Medicine, Bachelor of Surgery
(1973) (University of Sydney)**

**Diploma in Medical Jurisprudence (Clinical)
(1985) (Society of Apothecaries of London)**

**Fellow of the Australasian College of Legal
Medicine**

**Fellow of the Faculty of Forensic and Legal
Medicine of the Royal College of Physicians of
London**

**Fellow of the Faculty of Clinical Forensic
Medicine of the Royal College of Pathologists
of Australasia.**

Completion of the Postgraduate course for medical
practitioners in Medical Jurisprudence through the
University of London at the London Hospital
Medical College (1984)

I have the following affiliations:

Fellowship of the Australasian College of
Biomedical Scientists.

Fellow of the Royal Society of Medicine.

Member of the Medico-Legal Society of New South Wales.

Member of the Association for the Advancement of Automotive Medicine.

Member of the International Council for Alcohol, Drugs and Traffic Safety.

Member of the Australian Academy of Forensic Scientists.

Member of the Australasian Association of Forensic Physicians for its duration (2009 – 2015).

I have held the following appointments:

International Editorial Board of the Journal of Forensic and Legal Medicine (2007 – 2012). (Official Journal of the Faculty of Forensic and Legal Medicine of the Royal College of Physicians of London, the Australasian College of Legal Medicine and the British Association in Forensic Medicine)

Examiner for the Australian College of Legal Medicine (2008).

I have had the following experience since becoming registered in the state of New South Wales in December, 1972:

Resident Medical Officer - Royal Newcastle Hospital (January, 1973 - March, 1975).

Resident Medical Officer (Paediatrics) - Prince of Wales Hospital (March, 1975 - March, 1976).

General Practice - (March, 1976 - April, 1977)

Medical Officer Health Commission of New South Wales (April, 1977 - March, 1981)

Police Medical Officer - Police Medical Branch, New South Wales Health Commission and Police Department (March, 1981 - March, 1987).

Associate Honorary Medical Officer Royal Prince Alfred Hospital, Sexual Assault Unit 1985

Assistant Director - Police Medical Branch (March 1987 - September, 1991)

Director, Clinical Forensic Medicine Unit, New South Wales Police Service (September, 1991 - 2008)

Visiting Medical Officer Royal Prince Alfred Hospital (2005 -)

Adjunct Associate Professor - Central Clinical School, Sydney Medical School, University of Sydney (2008 -)

Since March 1981 I have had the following experience in clinical forensic medicine:

As a Police Medical Officer a special study into the pharmacology of alcohol has been undertaken:

- (i) Evaluating the physiological performance of subjects at varying blood alcohol concentrations.
- (ii) Examining the absorption and elimination rates of alcohol in subjects.
- (iii) Evaluating breath-analysing instruments including the Breathalyzer 900, the Dräger Alcotest 7110 and the Intoxilyzer 8000.
- (iv) Examining blood samples under various conditions of storage in relation to their blood alcohol concentrations.
- (v) Lecturing to Police on the pharmacology of alcohol.
- (vi) Lecturing to those Police undertaking the Breath-analysis Operator's Course on human anatomy and physiology as well as the pharmacology of alcohol and drugs.
- (vii) Lecturing to health, forensic and allied professionals on forensic medicine and the pharmacology of alcohol and other drugs in relation to traffic and other matters. This is locally, interstate and overseas.
- (viii) Preparing scientific papers (when necessary) for publication locally, interstate and overseas.

- (ix) Keeping in touch with current literature on forensic medicine and the pharmacology of alcohol and other drugs locally, interstate and overseas.
- (x) Preparing medico-legal reports, as required, and attending at Court to give evidence on forensic medicine and the pharmacology of alcohol. (Supreme Court, District Court, Magistrate's Court, Coroner's Court, Royal Commissions).

Lecturing on Forensic Medicine to Police Officers undertaking the detective's training course.

Lecturing to police officers responsible for custodial care.

Lecturing to police officers undertaking the trainee prosecutors' course.

Lecturing on anatomy, physiology, pharmacology and motor vehicle accident trauma to Police Officers undertaking the Crash Investigation Squad's training course.

Lecturing on forensic medicine to post-graduate students in the Law Faculty of the Western Sydney University.

Lecturing on forensic medicine to medical staff at public hospitals in New South Wales.

Lecturing on forensic medicine to undergraduate and postgraduate medical and science students at the University of Sydney.

Attending to other duties involving Clinical Forensic Medicine such as the examination and assessment of persons who may be victims, suspects or persons of interest and attending at the courts as a factual and expert witness as a consequence if required. Over the years in my employment I would have examined many persons in this capacity.

Since 1981 I have examined many persons who have been displaying the visible physical signs of trauma and I have also examined photographs of persons displaying visible physical signs of trauma. I have given expert opinions regarding many of these matters.

I have read the Expert Witness Code of Conduct Schedule 7 (District Court Rules Uniform Civil Procedure Rules 2005) and agree to be bound by it.

I have noted the following material in this matter.

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1. A copy of an email message from Detective Senior Constable TIERNEY to the Clinical Forensic Medicine Unit dated 12 December, 2016.
2. A copy of a letter from Detective Senior Constable Katherine TIERNEY to the Clinical Forensic Medicine Unit dated 1 December, 2016.
3. A copy of a "Report of Death to Coroner" prepared by Constable BARRETT and dated 24 November, 1989.
4. A copy of an Interim report on the post mortem of the body of John Alan RUSSELL by Dr. HOLLINGER dated 29 November, 1989.
5. A copy of a post mortem report on John Alan RUSSELL (89/2125) by Dr. HOLLINGER dated 29 January, 1990.
6. A copy of a Toxicology Report on the blood of John Alan RUSSELL by Keith William LEWIS dated 5 January, 1990.
7. A copy of Virology reports (89-V 128520, 89-V 128497) on the blood of John Alan RUSSELL conducted by Dr. CUNNINGHAM from the Institute of Clinical Pathology and Medical Research dated 25 November, 1989.
8. A copy of a statement about John Alan RUSSELL prepared by Dr. Anthony Frederick MOYNHAM (myself) from the Clinical Forensic Medicine Unit of the New South Wales Police dated 20 July, 2001.
9. A copy of a report prepared about John Alan RUSSELL by Dr. Allan D. CALA of the New South Wales Institute of Forensic Medicine and dated 14 August, 2001.
10. A copy of three (3) pages of notes made on anatomical images from the New South Wales Institute of Forensic Medicine. There is no date or signature on this material.
11. A copy of a statement prepared by Carlton Graeme CAMERON (retired police officer) in the matter of John Alan RUSSELL dated 29 May, 2002 together with what appear to be copies of Crime Scene and Exhibit notes (89- 2332).
12. A copy of what appears to be a press statement in the matter of John Alan RUSSELL prepared on 1 December, 1989.
13. A copy of several pages of crimes scene notes sent from Carlton CAMERON from the Crime Faculty of Western Sydney University to Steve PAGE of Paddington Police.
14. Photocopies of a photograph of what appears to be a mannequin dressed in male clothing. These photocopies are in black and white and are of poor quality.

15. A copy of a statement prepared by Detective (Tech) Senior Constable Manuel Antonio RIVERA from the Goulburn Crime Scene Section and dated 5 March, 2002. This statement also has thirty labelled photocopies of photographs attached.
16. A copy of a statement prepared by [1403] dated 24 November, 1989.
17. A copy of a statement prepared by Peter Edward RUSSELL dated 15 June, 2001.
18. An undated CD containing 48 photographs of the crime scene and a mannequin. I have assumed that some of those photographs (those of the deceased) were taken at the scene where the body of Mr. RUSSELL was found on 23 November, 1989.

According to the statement prepared by [1403] he was at the Bondi Hotel with Mr. RUSSELL from about 7.00pm to 7.15pm on the evening of 22 November, 1989. He stated that they both consumed middies of Power Beer. He stated that he consumed twelve (12) to fifteen (15) middies during the evening. This is the equivalent of between approximately thirteen (13) to approximately sixteen and a half (16½) standard drinks. He stated that he left the hotel at about 11.00pm leaving Mr. RUSSELL who was still in the bar.

When [1403] left the hotel he stated that he saw Mr. RUSSELL move up along the bar and begin to talk to the barmaid.

At about 10.00am on 23 November, 1989 the body of Mr. RUSSELL was discovered at the Bondi Beach South.

His death would have taken place between approximately 11.00pm on 22 November, 1989 and approximately 10.00am on 23 November, 1989.

On 29 November, 1989 a post-mortem examination was carried out on the body of Mr. RUSSELL by Dr. HOLLINGER from the Division of Forensic Medicine at Glebe.

She noted that he was 175 centimetres tall and weighed 55 kilograms. She stated that the cause of death was from "Multiple Injuries". There were no antecedent causes stated.

Blood was taken for toxicological analysis. Alcohol was detected in the blood sample at a concentration of 0.255 grams of alcohol in 100 millilitres of blood. No other substances were detected.

At a time following death the process of putrefaction will begin. During putrefaction micro-organisms can digest glucose in the body and produce alcohol. While putrefaction can occur following death it is unlikely that it would have been extensive in this situation. There is no putrefaction noted in the post mortem report however this does not exclude the possibility that some alcohol production could occur within the deceased following death. While this possibility of post-mortem alcohol production within the body of the

deceased cannot be discounted it is probable that it was very limited or not present.

It is stated that blood was collected for toxicological analysis during the post-mortem examination. It is not stated from where the blood was taken. If the blood sample was taken from a peripheral blood vessel it would be expected to reflect the blood alcohol concentration at the time of death. If it was taken from the heart or one of the major blood vessels in the chest it is possible that the blood alcohol concentration could have been erroneous due to alcohol diffusion into those areas during the time between death and when the post mortem was carried out.

The drinking history of Mr. RUSSELL is not recorded however if he consumed the same number of middies (12 to 15) of Powers Beer as 1403 between about 7.00pm and 11.00pm on 22 November, 1989 then it would be expected that he would be quite intoxicated at the time that the two male persons parted company.

Based upon the stated weight of Mr. RUSSELL (55 kilograms), the estimated number of middies (285 millilitres) of beer consumed (between twelve [12] to fifteen [15]), the type of beer (Powers Beer - 4.8% alcohol v/v) and the time during which the alcohol was consumed (7.00pm to 11.00pm) at 11.00pm the blood alcohol concentration of Mr. RUSSELL would lie within a range the lower limit of which would be not less than 0.244 grams of alcohol in 100 millilitres of blood and the upper limit of which would not exceed 0.385 grams of alcohol in 100 millilitres of blood. His most likely blood alcohol concentration would be close to 0.315 grams of alcohol in 100 millilitres of blood.

If the above amount of alcohol was consumed by Mr. RUSSELL it would be expected that at 11.00pm he would have been heavily intoxicated. It is not known if Mr. RUSSELL ceased consuming alcohol at that time or went on to consume more alcohol.

Alcohol is eliminated from the body at a rate of between 0.010 grams of alcohol in 100 millilitres of blood and 0.025 grams of alcohol in 100 millilitres of blood each hour. The average rate of elimination is 0.015 grams of alcohol in 100 millilitres of blood per hour.

I have no details of the activities of Mr. RUSSELL following the departure of 1403 from the hotel bar at about 11.00pm on 22 November, 1989.

It is not known if he consumed further alcohol or ceased consumption from about 11.00pm.

His death occurred at sometime between 11.00pm when 1403 left him in the bar and when he was found the following morning at about 10.00am on Bondi Beach South.

The post mortem blood alcohol concentration of 0.255 grams of alcohol in 100 millilitres of blood was most likely his blood alcohol concentration at the time of death.

It would be expected that at a blood alcohol concentration within the ranges stated above (0.244 grams of alcohol in 100 millilitres of blood to 0.385 grams of alcohol in 100 millilitres of blood) all persons would possess impairment of their perceptive skills and reaction time. Skills such as vision would be impaired. The brain would also be slow to process the content of any perceived activities and would also be slow to respond to them. It would also be impaired in its capacity to respond appropriately to such a stimulus. Critical thinking would be impaired.

It would be expected that the vast majority of persons, who had a blood alcohol concentration within the above stated range, would display signs of marked intoxication.

It is expected that this person would be displaying a gregarious personality not normally present when he was sober. His conversations may have been unusual because of mood and personality changes. It is possible that mood and personality changes could have made him more aggressive, more convivial, increasingly morose or a combination of many different moods during the time that he was intoxicated.

It would be expected that he would also appear to be unsteady when standing or walking as well as displaying some difficulty in being able to see things clearly especially in a darkened environment. Balance, coordination and spatial orientation would be impaired within the above range of blood alcohol concentrations.

The consequences of alcohol ingestion can include loss of restraint and a decrease in finer discrimination. It can also cause the impairment of memory, concentration, judgment and insight. Initially complex thinking is impaired. With increasing alcohol levels simple behaviour is impaired. There may also be some impairment of critical thinking. Vision may also be impaired as the blood alcohol concentration rises. There may also be amnesia.

A high blood alcohol level would not only increase the amount of time needed to respond to a stimulus but also increases the frequency of inappropriate error responses.

As the blood alcohol concentration increases it is possible that this may cause a person who is walking to be unaware of a difficult challenge in his path, such as obstacles, which might cause him to trip or fall. It is also possible that, as a consequence of alcohol in the body, a person could be partly or completely unaware of the nature of the surroundings to the extent that a decision to appreciate them could not be made critically. His capacity to respond to an unexpected incident such as a trip or loss of balance would be impaired. He is then at a greater risk of suffering the consequences, such as a traumatic injury, from a trip or loss of balance.

Within the range of the blood alcohol levels stated above there is deterioration of postural and body movement control. At the above-stated blood alcohol ranges it is probable that this may result in an inability to respond to an emergency situation as may arise when losing balance in a situation where a quick reaction is required to avoid a fall.

My opinion has not altered since I prepared a statement in this matter on 20 July, 2001. Based upon the additional information available to me in the preparation of this report I would regard the possibility of putrefaction to be less likely to have occurred.

At the time of his death the blood alcohol concentration of Mr. RUSSELL was 0.255 grams of alcohol in 100 millilitres of blood. At that blood alcohol concentration it would be expected that Mr. RUSSELL would have marked impairment of his capacity to function due the effects of alcohol as have been outlined above.

This level of intoxication would make a person more prone to trauma as a consequence of physical impairment. It would also make a person more vulnerable to predatory behaviour by other persons. His capacity to protect or defend himself would be impaired. It must be noted that he also had a relatively small body weight of 55 kilograms.

There was probable marked intoxication at the time of death. It is not possible to determine if he was the victim of an accident or if he was the victim of foul play. Both are possible.

Yours faithfully,



A. Moynham
Adjunct Associate Professor
Sydney Forensic Medicine and Science Network
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